VIRGINIA POLLUTION ABATEMENT (VPA)

PERMIT APPLICATION

FORM A – GENERAL INFORMATION

Department of Environmental Quality

Department of Environmental Quality

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION

FORM A – GENERAL INFORMATION

INSTRUCTIONS

All applications submitted for a Virginia Pollution Abatement (VPA) Permit shall include this form.

1. **FACILITY OR APPLICANT INFORMATION**:
   a. If applying for a permit which will authorize management of pollutants at a facility, including but not limited to a wastewater treatment plant, sludge treatment facility, routine storage facility (not located at the treatment plant), or an Animal Feeding Operation (AFO), provide the following information:
      - Facility Name: The legal name of the facility managing the pollutants,
      - City/County: The city or county in which the facility is located,
      - Physical Location/Address: The physical location or address of the facility, and
      - Mailing Address: The mailing address of the facility. If the same as physical address write SAME.

   b. If applying for a permit to authorize land application activities only, where no facility is included, provide the following information:
      - Applicant Name: The name of the applicant,
      - City/County: The city or county in which the land application is proposed,
      - Physical Location/Address: The physical address of the office which will manage the activities, and
      - Mailing Address: The mailing address of the office which will manage the activities. If the same as physical address write SAME.

2. **OWNER INFORMATION**: Provide the legal name, mailing address, telephone number and e-mail address of the owner or the company making application for the VPA Permit.

3. **OWNER CONTACT INFORMATION**: Provide the name, title, mailing address, telephone number and e-mail address of the individual whom DEQ staff should contact regarding this application. If the owner contact is the same as the owner, write SAME.

4. **EXISTING PERMITS**: List all environmentally-related permits issued to the facility by listing the issuing agency and permit number. Include an existing VPA permit if your facility has one.

5. **NATURE OF BUSINESS**: Provide a general statement of the type of business conducted at the facility. Industrial facilities are requested to provide applicable Standard Industrial Classification (SIC) Codes. SIC Codes may be obtained from Standard Industrial Classification Manual published by the U.S. Department of Labor, Occupational Safety and Health Administration. The manual can be found in public libraries and on the internet.

6. **TYPE OF POLLUTANT MANAGEMENT ACTIVITY**: Indicate pollutants or type of waste(s) handled and whether the facilities are either existing or proposed, or both. Note that the pollutant or type of waste determines which other VPA application forms must be completed. Applicants may also contact the DEQ for assistance.

7. **GENERAL LOCATION MAP**: The purpose of the map is to allow the DEQ staff to readily find the establishment. This map is to show the general location of the establishment. Applicants should use county or United States Geological Survey quadrangle maps. DEQ Regional Offices can provide information for obtaining such maps.

8. **CONSENT TO RECEIVE AND CERTIFY RECEIPT OF ELECTRONIC MAIL**: The Department of Environmental Quality (DEQ) may deliver permits, certifications and plan approvals to recipients, including applicants or permittees, by electronically certified mail where the recipients notify DEQ of their consent to receive mail electronically (§ 10.1-1183). Check only one of the options.

9. **SIGNATURE AND CERTIFICATION STATEMENT:** The application must be signed in accordance with the VPA Permit Regulation (9VAC25-32):
   a. **FOR A CORPORATION**: by a responsible corporate official. For purposes of this section, a responsible corporate official means (l) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or (2) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25,000,000 (in second-quarter l980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
   b. **FOR A MUNICIPALITY, STATE, FEDERAL OR OTHER PUBLIC AGENCY**, by either a principal executive officer or ranking elected official. (A principal executive officer of a Federal, Municipal, or State agency includes the chief executive officer of the agency or head executive officer having responsibility for the overall operation of a principal geographic unit of the agency).
   c. **FOR A PARTNERSHIP OR SOLE PROPRIETORSHIP**, by a general partner or the proprietor, respectively.

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1. FACILITY OR APPLICANT INFORMATION

Facility Name or Applicant Name:	Lexington-Rockbridge Regional Water Quality Control Facility
County/City:	Rockbridge
Physical Location/ Address:	135 Bob Akins Circle Lexington VA. 24450
Mailing Address:	130 Osage Lane Lexington VA. 24450

2. OWNER INFORMATION

Owner Legal Name:	Maury Service Authority
Mailing Address:	130 Osage Lane Lexington VA.24450
Telephone Number:	(540) 463-3566
Email address:	j.combs@msaplant.org

3. OWNER CONTACT INFORMATION

Owner Contact Name:	~~Michael Loudermilk~~ Ervin Buchanan
Title:	~~Maintenance Lead~~ Wastewater Superintendent
Mailing Address:	~~135 Bob Akins Circle~~ 135 Bob Akins Circle, Lexington, VA 24450
Telephone Number:	~~(540) 817-0224~~ 540-784-8232
Email address:	~~m.loudermilk@msaplant.org~~ e.buchanan@msaplant.org

4. EXISTING PERMITS: (e.g., VPA, VPDES; VWP, RCRA; UIC; other)

Agency	Permit Type	Permit Number
DEQ	VPDES	VA 008161

5. NATURE OF BUSINESS: Municipal Wastewater Treatment

SIC Code(s):			

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6. TYPE OF POLLUTANT MANAGEMENT ACTIVITY: *check the appropriate box(es)*

	Proposed	Existing
Animal Feeding Operations (complete Form B)	☐	☐
Industrial Waste (complete Form C & Form D: Parts D-V & D-VI)	☐	☐
Land Application of Municipal Effluent (complete Form D: Parts D-I & D-III)	☐	☐
Land Application of Biosolids/Sewage Sludge (complete Form D: Parts D-II, D-IV, D-V & D-VI; and Liability Requirements for Transport, Storage and Land Application of Biosolids Form)	☑	☐
Reclamation and/or Distribution of Reclaimed Wastewater (Application Addendum)	☐	☐

7. GENERAL LOCATION MAP:

Provide a general location map which clearly identifies the location of the facility.

8. CONSENT TO RECEIVE AND CERTIFY RECEIPT OF ELECTRONIC MAIL:

The Department of Environmental Quality (DEQ) may deliver permits, certifications and plan approvals to recipients, including applicants or permittees, by electronically certified mail where the recipients notify DEQ of their consent to receive mail electronically (§ 10.1-1183). Check only one of the following to consent to or decline receipt of electronic mail from DEQ as follows:

☑ Applicant or permittee agrees to receive by electronic mail the permit and any plan approvals associated with the permit that may be issued for the proposed pollutant management activity, and to certify receipt of such electronic mail when requested by the DEQ.

☐ Applicant or permittee declines to receive by electronic mail the permit and any plan approvals associated with the permit that may be issued for the proposed pollutant management activity.

9. SIGNATURE AND CERTIFICATION STATEMENT:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. I further certify that I am an authorized signatory as specified in the VPA Permit Regulation (9VAC25-32).

Signature:	J. Jordan Combs	Date:	9/27/19
Printed Name:	L. JORDAN COMBS		
Title:	EXECUTIVE DIRECTOR		

VIRGINIA POLLUTION ABATEMENT APPLICATION

FORM D

MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-II LAND APPLICATION OF BIOSOLIDS

All of the information provided in this application will become part of the Biosolids Management Plan associated with a VPA individual permit issued for the proposed activity.

General Information

1. Owner Legal name. (Provide the same name given on Form A, Item 2).
   Maury Service Authority

2. Provide a general description of the proposed operation.
   a. Source List: Provide a list of the facilities that generate the biosolids that you currently land apply or propose to land apply. If the facility has multiple wastestreams that receive different treatment types; identify the biosolids produced by each treatment process as a separate source from the generating facility. Include all sources that you wish to be included in this permit. Include only sources that are identified as approved on the DEQ Sources list. (A source of biosolids at the generating facility is the product of a specific series of treatment unit processes, and a single facility may have multiple sources. For example, a generator that splits its waste activated sludge, half to a digester and a belt press and the other half to lime stabilization has 2 sources of biosolids). Include the following information using the Form D VPA Permit Application Workbook Tab **D II.2.a. Source List**
      1) Generating Facility's name (as it is identified on the DEQ Sources List)
         Lexington Rockbridge Regional WQCF
      2) Generating Facility's discharge permit number VPDES, NPDES or other state permit;
         VPDES – VA00889161
      3) Biosolids Treatment Type
         Aerobic Digestion
      4) Biosolids Quality (EQ Cake biosolids; Class A CPLR biosolids; Class B PC biosolids; Class B CPLR biosolids)
         Class B PC
      5) Generating Facility's Owner
         Maury Service Authority
      6) Generating Facility's location – Address, city and state
         135 Bob Akins Circle
         Lexington VA. 24450
      7) Annual Amount of Sludge/Biosolids Produced
         276.4 dry metric tons (2018)
      8) Annual Amount Biosolids Land Applied
         178.4 dry metric tons (2018)
      9) Approval Date
         February 1st 2015

   b. Provide each generating facility's odor control plan for the sources identified above, if a current odor control plan has not been submitted to DEQ. The odor control plan shall contain at minimum:
      Odor Control Plan – (included in package)

      1) Methods used to minimize odor in producing biosolids;
      2) Methods used to identify malodorous biosolids before delivery to the land applier (at the generating facility);
      3) Methods used to identify and abate malodorous biosolids if delivered to the field, prior to land application; and
      4) Methods used to abate malodor from biosolids if land applied;

c. Provide an updated Non-Hazardous Declaration Statement - Part D-V for each biosolids source from the approved source list.
Attached

d. General location: Describe the general location of the sites proposed for application, and
See attached maps (2)

e. Methods of biosolids application proposed.
Biosolids are surface applied as a liquid

3. Identify the methods for notification of DEQ and local government prior to proposed land application activities.

4. Provide to the DEQ and to each locality in which the biosolids are to be applied, written evidence of financial responsibility. Evidence of financial responsibility shall be provided in accordance with the requirements specified under 9VAC25-32-770 et seq.
To be provided

Design Information

Biosolids Characterization

5. For each new source of biosolids proposed for land application provide:

a. Part D-IV, a Biosolids Characteristics Form for each source of biosolids that is not identified on the VA DEQ Approved Biosolids Source List. The following biosolids sources will always require a characterization form:
1) biosolids from a new generating facility;
NA
2) biosolids from an existing generator that has never been approved for land application in Virginia;
NA
3) biosolids previously approved for which the generator has not submitted biosolids monitoring data in the past 5 years; or
NA
4) biosolids produced by a new treatment process within an existing facility.
NA

b. Part D-V - Non-Hazardous Declaration Statement.
Attached

Biosolids Storage

NA

6. List in a tabular format, using Form D VPA Permit Application Workbook **Tab D II.6. Storage**, all existing and proposed **routine** biosolids storage facilities and **on-site** storage under the control of the permit applicant. Provide the permit name and number associated with the storage facility or site. Include for each, the storage facility or site name, the location, total storage capacity, current available capacity and the biosolids contracts currently permitted or assigned to these facilities or sites.

7. Provide plans and specifications for proposed **routine** and **on-site** storage facilities that depict the following information:

a. Site layout on a recent 7.5 minute topographic quadrangle or other appropriate scaled map with the following information:
1) Location of any required soil, geologic and hydrologic test holes or borings
2) Location of the following field features within 0.25 miles of the site boundary (indicated on the map) with the approximate distances from the site boundary.
(a) Water wells (operating or abandoned).
(b) Surface waters.

(c) Springs.
(d) Public water supplies.
(e) Sinkholes.
(f) Underground and/or surface mines.
(g) Mine pool (or other) surface water discharge points.
(h) Mining spoil piles and mine dumps.
(i) Quarries.
(j) Sand and gravel pits.
(k) Gas and oil wells.
(l) Diversion ditches.
(m) Occupied dwellings, including industrial and commercial establishments.
(n) Landfills - dumps.
(o) Other unlined impoundments.
(p) Septic tanks and drainfields.
(q) Injection wells.

b. Topographic map (10-foot contour preferred) of sufficient detail to clearly show the following information:
   (1) Maximum and minimum percent slopes.
   (2) Depressions on the site that may collect water.
   (3) Drainage ways that may attribute to rainfall run-on to or runoff from this site.
   (4) Portions of the site (if any) which are located within the 100-year floodplain.

c. Data and specifications for the liner proposed for seepage control.

d. Scaled plan view and cross-sectional view of the storage facilities or sites showing inside and outside slopes of all embankments and details of all appurtenances.

e. Calculations justifying impoundment capacity, including freeboard where applicable.

f. A description of supernatant handling and disposal.

g. Groundwater monitoring plans for the facilities or sites including pertinent hydrogeological data to justify upgradient and downgradient well location and depth.

8. For the routine storage of biosolids, provide evidence of certification by the local government of the locality in which the biosolids are to be stored that the storage site is consistent with all applicable ordinances. Evidence of certification shall consist of the following:

   a. A copy of the certification from the local government confirming that the storage site is consistent with all applicable ordinances, or where the local government fails to respond within 30 days of receiving the request for certification, a copy of the letter from the applicant to the local government requesting certification of the storage facility; **or**

   b. A copy of the special exception or special use permit from the local government that has adopted an ordinance in accordance with § 62.1-44.19:3.R of the Code of Virginia.

Biosolids Transport

9. Provide a detailed description for each of the following:

   a. Vehicles that will be used to transport biosolids from generators or storage to land application sites;
   2000 Ford F-750 with 2300 gallon tank
   2007 Ford F-750 with 2800 gallon tank
   b. Routes to be used to transport biosolids from the generator(s) to storage unit(s);
   Refer to haul route maps located in each sitebook

c. Procedures for biosolids off-loading at the biosolids facilities and the land application site together with spill prevention, cleanup (including vehicle cleaning) and emergency spill notification and cleanup measures; and
Spill response and recovery plan attached. Off loading is done as biosolids are applied (no storage). After site application, trucks are washed down on site with on board clean wash water.

d. Voucher system to be used to document transport and delivery of biosolids from their source to the land application site or a facilityto further process the biosolids for marketing. Also describe record retention for vouchers.
Driver of applicator keeps a Biosolids log (see attached) this log is used as a tracking method for amounts and sites. This log is submitted to DEQ with the monthly activity report.

Field Operations

10. For field operations involving storage, provide a detailed description for each of the following:
NA

a. Routine storage—procedures for biosolids loading of transport vehicles, equipment cleaning, freeboard maintenance for storage of liquid biosolids, and inspections for structural integrity of the storage unit;

b. On-site storage—procedures for DEQ approval and implementation; designated site locations if provided in the "Design Information"; the specific site criteria including the best management practices that will be utilized to prevent contact with storm water run on or runoff and the procedures to be followed to ensure the 45 day time limit will be met;

c. Staging - procedures for DEQ notification; procedures to be followed including either designated site locations provided in the "Design Information" or the specific site criteria for such locations including the liner or cover requirements and the time limit assigned for such use;

d. Procedures for reestablishment of off-loading and staging areas.

11. Provide a detailed description for each of the following:

a. The biosolids spreader vehicles and the specifications of each vehicle.
The spreader/transport vehicles are closed water-tight tank trucks designed to prevent leaks and spills. The tanker trucks MSA currently owns and uses as of (August 2019), have freshwater tanks and garden hoses for cleaning. Tanks are capped off during transport to prevent leaks from valve failures. The tankers are are loaded and the gallons of each load is documented.

b. Procedures for calibrating each spreader based on the solids content of various biosolids to ensure uniform distribution and appropriate loading rates on a day-to-day basis.
Trucks are driven at same speed over the site to apply an even amount of biosolids. The tanks on the trucks are pressurized and the biosolids flow out on to a splash plate and spray an even amount.

c. Procedures used to ensure that operations address the following constraints:
(1) Application of biosolids to frozen ground, pasture or hay fields, crops for direct human consumption and saturated or ice/snow covered ground; and
Certified land appliers check field conditions daily; Use land application agreements for coordination of land use.

(2) Establishment of setback distances, slopes, prohibited access for beef and dairy animals, soil pH requirements, and proper site specific biosolids loading rates on a field-by-field basis.

Setback distances and slopes are field verified and temporary fencing is installed if required. Soil sampling and biosolids results are used on the nutrient management plan for load ratings. Field features are identified on site maps that are carried by land appliers along with best field management practices.

12. Provide a Land Applier Odor Control Plan that includes at a minimum:
    Attached

    a. Methods used to identify and abate malodorous biosolids in the field prior to land application, and

    b. Methods used to abate malodorous biosolids if land applied.

Land Application Sites

13. Provide a comprehensive list that includes each field proposed for inclusion in the permit. For each field include the following information using Form D VPA Permit Application Workbook Tab **D II.13.a Permitted Fields** or Tab **D II.13.b New Fields**: *DEQ Control Number; Site Book Name; Field ID in the format as it will be used in monthly reports; gross acres of the field; landowner names, date on landowner agreement(s); Tax parcel ID;* latitude and longitude of each land application site in decimal degrees to three decimal places and the method of determination; the type of site and crops to be grown. For modifications to existing fields, include the change in acreage and a description of the modification to the field.
    Attached

    Submission of a completed Fields tab in the Form D VPA Permit Application Workbook supersedes the need to complete the Landowner Coordination Form in the Landowner Agreement, VPA Permit Application Form D-VI.

    Site Type includes agricultural land, forest, a public contact site, or a reclamation site, as defined in 9VAC25-32-10.

    Use the **Permitted Fields** tab for reissuance and modifications to existing fields. Use the **New Fields** tab for issuance of new permits and addition of new fields during reissuance and modifications.

    When submitting a permit application for a permit modification, do not include existing permitted fields that are not being modified or removed.

14. Provide a properly completed Land Application Agreement form for each landowner, Part D-VI.
    - Each landowner must sign his or her own landowner agreement form.
    - Provide the name, mailing address, and telephone number of the site owner identified on that form.
    - See Part D-VI: Land Application Agreement – Biosolids and Industrial Residuals – Instructions for specific details on completing the form.

    Permitted Fields Part D-IV Land Application Agreements have been previously provided.
    Part D-IV Land Applications Agreements for New Fields are attached.

15. Provide a legible topographic map and aerial photograph, including legend, of proposed application areas to scale as needed to depict the following features:
    Attached

    a. Property boundaries;
    b. Surface watercourses, including drainage ways;
    c. Water supply wells and springs;
    d. Roadways;
    e. Rock outcrops;
    f. Slopes;
    g. Sinkholes
    h. Frequently flooded areas (National Resources Conservation Service (NRCS) designation);
    i. Occupied dwellings within 400 feet of the property boundaries and all existing dwelling and property line setback distances;
    j. Publicly accessible properties and occupied buildings within 400 feet of the property boundaries and the associated extended setback distances; and
    k. The gross acreage of the fields where biosolids will be applied;

16. Provide a county map or other map of sufficient detail to show general location of the site and proposed transport vehicle haul routes to be utilized from the treatment plant or storage facility.
Attached

17. Provide county tax maps labeled with Tax Parcel ID(s)] for each farm to be included in the permit, which may include multiple fields to depict properties within 400 feet of the field boundaries.
Attached

18. Provide a USDA soil survey map, if available, of proposed sites for land application of biosolids.
Attached

19. Provide the name, mailing address, and telephone number of the person who applies biosolids to the site, if different from the applicant.
Attached, if required.

20. Provide the following information for each land application site that has been identified at the time of permit application, if the applicant intends to apply bulk biosolids subject to the cumulative pollutant loading rates in 9VAC25-32-356 Table 3 to the site:
NA

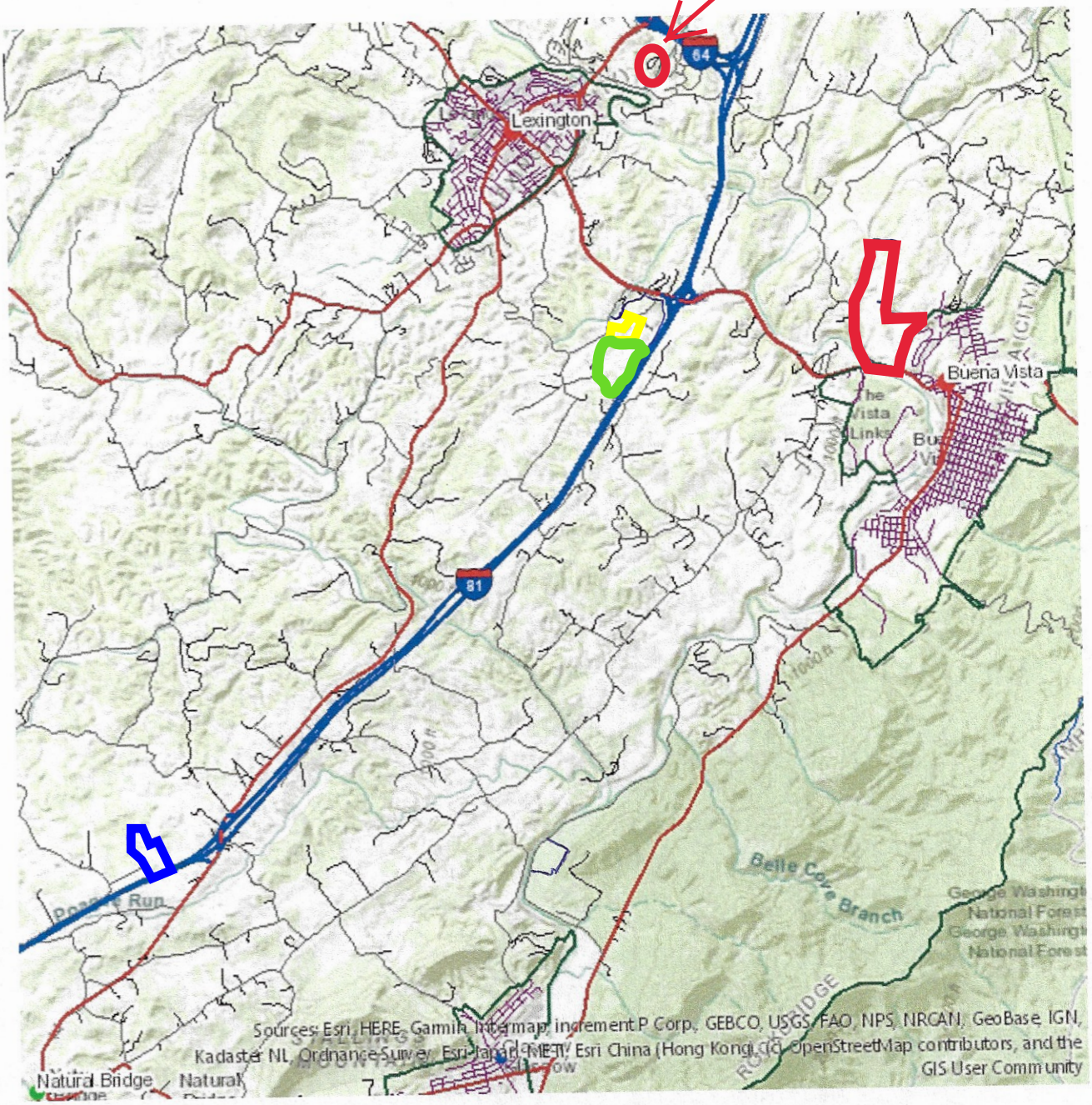
    a. Whether the applicant has contacted VA DEQ to ascertain whether bulk biosolids subject to 9VAC25-32-356 Table 3 has been applied to the site on or since July 20, 1993, and if so, the name of person contacted; and
    b. Identification of facilities other than the applicant's facility that have sent, or are sending, biosolids subject to the cumulative pollutant loading rates in 9VAC25-32-356 Table 3 to the site since July 20, 1993, if, based on the inquiry in item (a) above, bulk biosolids subject to cumulative pollutant loading rates in 9VAC25-32-356 Table 3 has been applied to the site since July 20, 1993.

21. Provide a nutrient management plan approved by the Department of Conservation and Recreation and a copy of the DCR approval letter for application sites meeting the following conditions:
NA

    a. Sites operated by an owner or lessee of a confined animal feeding operation, as defined in subsection A of § 62.1-44.17:1 of the Code of Virginia, or confined poultry feeding operation, as defined in subsection A of § 62.1-44.17:1.1 of the Code of Virginia;
    b. Sites where land application more frequently than once every three years at greater than 50% of the annual agronomic rate is proposed;
    c. Mined or disturbed land sites where land application is proposed at greater than agronomic rates; or
    d. Other sites based on site-specific conditions that increase the risk that land application may adversely impact state waters.

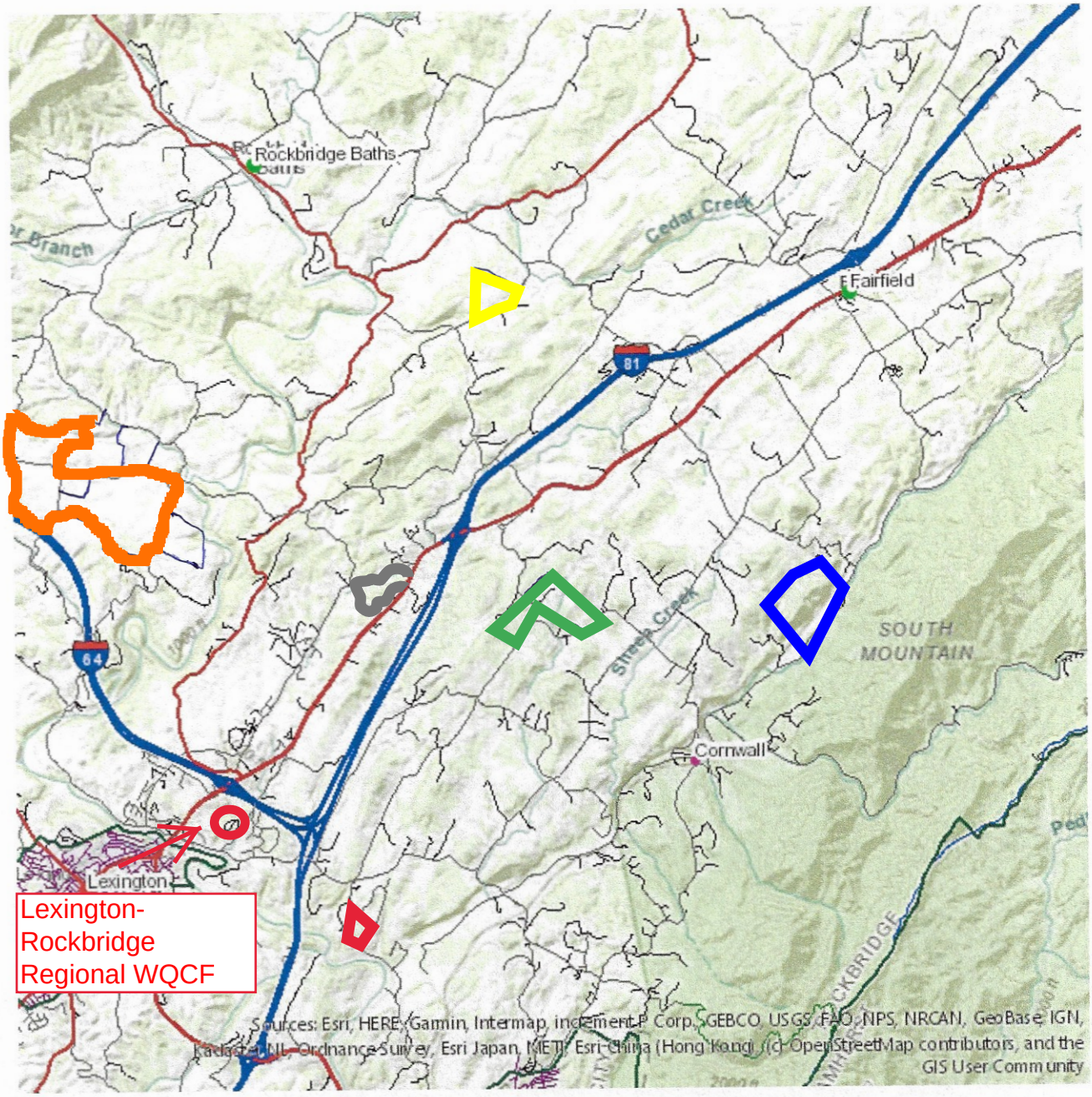
22. For mined or disturbed sites where land application is proposed at greater than agronomic rates, provide a reclamation plan that establishes the biosolids application rates and other site-specific management practices.
NA

Lexington-Rockbridge Regional WQCF



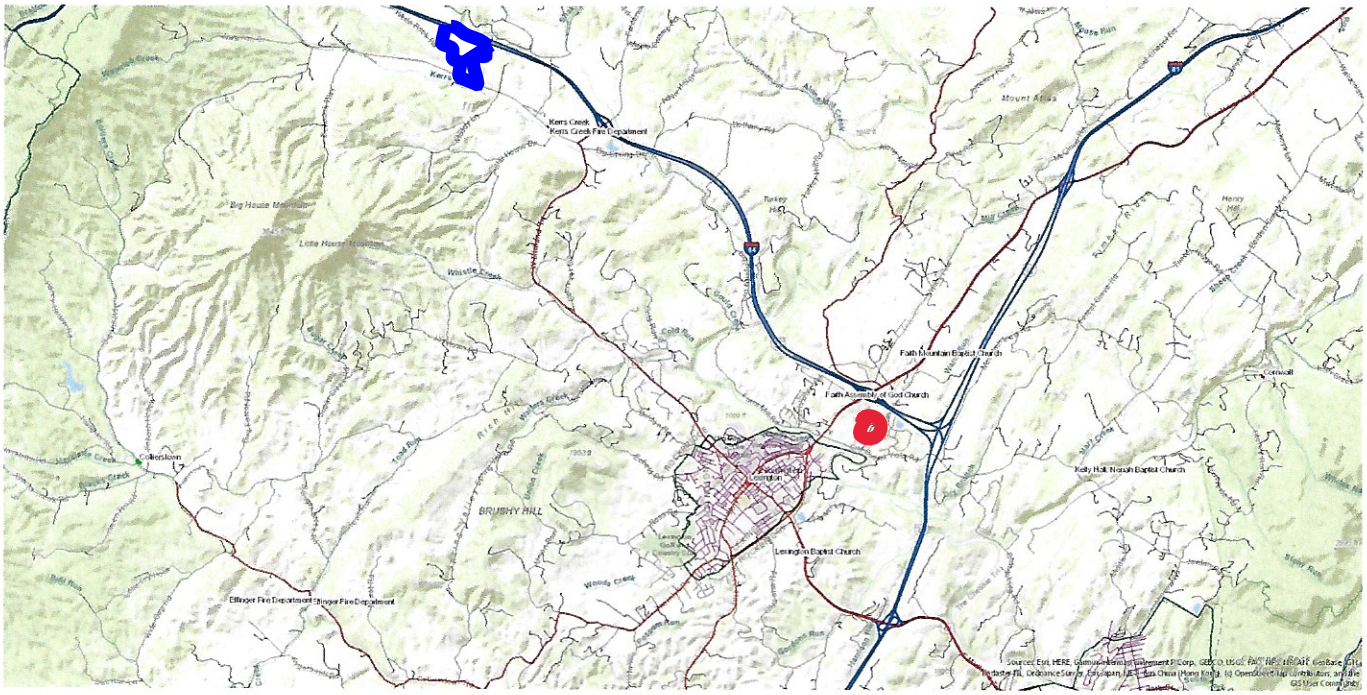
Map Key

- Carter Farm 2018
- Funkhouser Farm 2019 (new)
- Voss Farm 2018
- Voss Farm 2019 (new)



Map Key

- Baisley Farm pre-2016
- Martin Farm pre-2016
- Pennington 2018
- Williams 2018
- Swisher (Home, Reid, High Meadow) 2019 (New)
- Hostetter pre-2016



Lexington - Rockbridge WQCF

Swisher - Stevens Farm

VIRGINIA POLLUTION ABATEMENT APPLICATION

FORM D

MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-IV BIOSOLIDS CHARACTERIZATION FORM

1. Facility Name: Lexington-Rockbridge Regional Water Quality Control Facility

2. Design Flow: 3 MGD

3. Annual Sludge/Biosolids Production (Total): 276.4 (2018) metric tons (dry weight basis)

4. Annual Biosolids Land Applied or Distributed:178.4 (under VPDES VA0088161) metric tons (dry weight basis)

5. Source Identification (if facility produces multiple sources):
Lexington-Rockbridge Regional Water Control Facility VPDES 0088161 and Water Plant

6. Pathogen Treatment Classification: ☐ Class A X Class B

7. Indicate Pathogen Reduction Option and provide monitoring and process control data from the most recent 3 months of production:

Class B:

X Alternative 1: Fecal coliform testing -geometric mean of 7 samples

☐ Alternative 2: Process to Significantly Reduce Pathogens (PSRP) - if selected, indicate process below:

Process: ☐ anaerobic digestion X aerobic digestion ☐ alkaline stabilization ☐ air drying ☐ composting

☐ other ____

Class A:

☐ Alternative 1: Fecal coliform or Salmonella testing and heat treatment at or above 50°C.

☐ Alternative 2: Fecal coliform or Salmonella testing and alkaline stabilization at or above 52°C.

☐ Alternative 3: Fecal coliform or Salmonella testing and enteric virus and viable helminth ova testing and evaluation when enteric viruses and viable helminth ova prior to pathogen treatment are equal to or greater than 1 Plaque-forming unit or one ova, respectively, per 4 grams total solids.

☐ Alternative 4: Fecal coliform or Salmonella testing and enteric virus and viable helminth ova testing.

☐ Alternative 5: Process to Further Reduce Pathogens (PFRP) - Fecal coliform or Salmonella testing and process indicated below:

Process: ☐ composting at 55°C ☐ heat drying at 80°C ☐ heat treatment at 180°C

☐ thermophilic aerobic digestion ☐ beta ray irradiation ☐ gamma ray irradiation

☐ pasteurization ☐ other _____

8. Indicate Vector Attraction Reduction Option and provide monitoring and process control data from the most recent 3 months of production:

☐ ≥ 38% volatile solids reduction ☐ anaerobic 40 day bench test

☐ aerobic 30 day bench test X Specific Oxygen Uptake Rate (SOUR) test

☐ 14 days aerobically treated at 104° F ☐ alkaline stabilization

☐ drying to ≥75% total solids with no primary sludges ☐ drying to ≥90% total solids including primary sludges

☐ no vector attraction reduction at WWTW – 6 hour incorporation into soil or injection into soil

9. Provide a description of the method of sludge treatment or stabilization for each biosolids source, including a flow diagram of each residual treatment.

   Attached

10. Provide biosolids analytical data for the following parameters from a minimum of 3 samples taken within 4 ½ years prior to the date of the permit application. Samples must be representative of the biosolids to be land applied and taken at least one month apart. Existing data may be used in lieu of sampling done solely for the purpose of this application. For all analyses, provide the documentation from a VELAP certified laboratory that indicates analysis result, analytical method used, and method detection level.

    Previously submitted with each monthly with sludge report (sample collected in March of each year)

	Average Monthly Concentration(1)		
Parameter	Month/Year(2):	Month/Year(2):	Month/Year(2):
Percent Solids	%	%	%
Volatile Solids	%	%	%
pH	SU	SU	SU
Alkalinity as $CaCO_3$(3)	mg/kg	mg/kg	mg/kg
Nitrogen, (Nitrate)	mg/kg	mg/kg	mg/kg
Nitrogen, (Ammonium)	mg/kg	mg/kg	mg/kg
Nitrogen, (Total Kjeldahl)	mg/kg	mg/kg	mg/kg
Phosphorus, (Total)	mg/kg	mg/kg	mg/kg
Potassium, (Total)	mg/kg	mg/kg	mg/kg
Arsenic	mg/kg	mg/kg	mg/kg
Cadmium	mg/kg	mg/kg	mg/kg
Copper	mg/kg	mg/kg	mg/kg
Lead	mg/kg	mg/kg	mg/kg
Mercury	mg/kg	mg/kg	mg/kg
Molybdenum	mg/kg	mg/kg	mg/kg
Nickel	mg/kg	mg/kg	mg/kg
Selenium	mg/kg	mg/kg	mg/kg
Zinc	mg/kg	mg/kg	mg/kg

(1) Values to be reported on a dry weight basis unless indicated.

(2) If only one sample was analyzed in the month specified, it is not necessary to transpose the values from the attached laboratory sheet to the table above.

(3) Lime treated biosolids (10% or more lime by dry weight) must be analyzed for percent $CaCO_3$.

11. Provide calculations describing the average nutrient value of the biosolids as pounds per dry ton for the following parameters:

Previously submitted with monthly sludge report

Plant Available Nitrogen	Phosphorus (P_2O_5)	Potassium (K_2O)	Calcium Carbonate Equivalence (for lime treated biosolids)
lbs/dry ton	lbs/dry ton	lbs/dry ton	%

12. Provide a representative PCB analysis if results have not been supplied to DEQ.

Polychlorinated biphenols _____mg/kg

13. For Exceptional Quality Biosolids, provide at least one analysis for each parameter.

Parameter	Biosolids Concentrations(1)
Aldrin/dieldrin (total)	_____mg/kg
Benzo (a) pyrene	_____mg/kg
Chlordane	_____mg/kg
DDT/DDE/DDD (total)(2)	_____mg/kg
Dimethyl nitrosamine	_____mg/kg
Heptachlor	_____mg/kg
Hexachlorobenzene	_____mg/kg
Hexachlorobutadiene	_____mg/kg
Lindane	_____mg/kg
Toxaphene	_____mg/kg
Trichloroethylene	_____mg/kg

(1) Values to be reported on a dry weight basis.

(2) Note: DDT = 2,2--Bis (p-chlorophenyl)--1,1,1—Trichloroethane; DDE = 1,1--Bis (p-chlorophenyl)-- 2,2—Dichloroethylene; DDD = 1,1--Bis (p-chlorophenyl)--2,2--Dichloroethane

14. Provide at least one analysis of any other pollutants which you believe may be present in the biosolids. Upon review, additional analyses may be required by DEQ.
At this time, we do not feel there are any other pollutants

_____ _____

_____ _____

15. Based on the amount of biosolids to be land applied or distributed annually, indicate the sampling frequency:

Amount of biosolids(1) (metric tons per 365-day period) G	Frequency	Check one:
Greater than zero but less than 290	Once per year	X
Equal to or greater than 290 but less than 1,500	Once per quarter (four times per year)	
Equal to or greater than 1,500 but less than 15,000	Once per 60 days (six times per year)	
Equal to or greater than 15,000	Per month (12 times per year)	

(1) Either the amount of bulk biosolids applied to the land or the amount of biosolids received by a person who prepares biosolids that is sold or given away in a bag or other container for application to the land (dry weight basis).

VIRGINIA POLLUTION ABATEMENT APPLICATION

FORM D

MUNICIPAL EFFLUENT AND BIOSOLIDS

PART D-V NON-HAZARDOUS WASTE DECLARATION

For waste to be land applied, the owner of the treatment works, as defined by 9 VAC 25-32-10, must sign the following statement:

I certify that the waste from the facility identified below and described in this application is non-hazardous and not regulated under the Resource Conservation and Recovery Act or the Virginia Hazardous Waste Management Regulation (9 VAC 20-60).

Facility
Name: Lexington-Rockbridge Regional WQCF

VPDES, NPDES or State Permit Number: VA0088161

(Signature of Owner) 9/27/19 (Date)

L. Jordan Combs
(Printed Name of Owner)

Executive Director
(Title)

Generator Contact Information

Ervin Buchanan Wastewater Plant Superintendent
(Name and Title)

135 Bob Akins Circle Lexington Va. 24450
(Address)

(540) 784-8232
(Phone Number)

e.buchanan@msaplant.org
(Email Address)

Odor Control Plan - Generator

Facility Name: Lexington-Rockbridge Regional WQCF
Address: 135 Bob Akins Circle
City State: Lexington, VA 24450

VPDES/NPDES Permit Number:
VA0088161

Contact Name: Ervin Buchanan
Phone Number: 540 784 8232
Email address: e.buchanan@msaplant.org

"Malodor" means an unusually strong or offensive odor associated with biosolids or sewage sludge as distinguished from odors commonly associated with biosolids or sewage sludge.

Answer all 4 questions and check all methods that apply OR add alternative methods.

1) Identify methods used to minimize odor during production of biosolids:

Vector Attraction Reduction Method:

☐ 38% VSS solids reduction – Treatment minimizes odors through anaerobic digestion to produce Class B biosolids. Digestion detention times and digester temperatures along with volatile solids reduction are monitored to ensure that State and Federal standards are achieved.

☐ Lime Addition: Treatment includes adding sufficient lime to the biosolids to raise the pH to > 12 after two hours and then testing again after an additional 22 hours for a pH greater than 11.5. Lime feed rates and biosolids pH data will be recorded and checked.

Additional procedures (if applicable):

☐ 15 day minimum detention time and a minimum of 95 degrees F in anaerobic digestion will be maintained

X SOUR testing of biosolids

X Fecal coliform testing of biosolids

X Avoid septic conditions during sludge production

X Maintain alkalinity during aerobic digestion

X Monitor all sludge produced for SOUR < 1.5 mgL and Fecal Coliform to satisfy class B pathogens. Solids not released to Sludge Storage Tank until stabilization and pathogen reduction for Class B biosolids met.

X Addition of Ferric Chloride during secondary treatment and to Sludge Storage Tank during long storage periods

X Digester detention time can be increased by feeding waste activated sludge through the Gravity Belt Thickener prior to digestion

X The Sludge Storage Tank is equipped with mixers which help prevent septic conditions in the tank

X Efforts are made to minimize holding time in the Sludge Storage Tank

2) Identify methods used to identify malodorous biosolids at the generating facility:

X Wastewater treatment facility staff will periodically perform visual as well as odor observations of the biosolids being digested to ensure that nothing out of the ordinary is occurring during processing operations. If the solids appear to have unusual odors, these solids will be further treated and will not be thickened to the Sludge Storage Tank until the odor has improved.

X Dissolved oxygen, pH, alkalinity, volatile solids, and SOUR testing during digestion

X Wastewater treatment facility staff will periodically observe loading operations to check odor conditions of biosolids

3) Identify methods used to identify and abate malodor after delivery to a land application site (before land application):

☐ The land application contractor's personnel will perform a visual as well as odor observation biosolids delivered to the land application sites. They will determine if any of the individual loads arriving on-site appear to be more odorous and darker in color than usual. If malodor of the biosolids is present, the contractor will confer with wastewater treatment plant staff and can remove the biosolids and return those loads to the wastewater treatment plant for further treatment or transport to a landfill

X Confer with land applicator and utilize a remote land application site

☐ Check pH levels on suspect lime stabilized biosolids

X Contract land applicator (emergency disposal) will use methods identified in land applicator's odor control plan

4) Identify methods used to abate malodor after land application:

X Incorporate biosolids into the soil

☐ Use a deodorizer

X Addition of lime

X Contract land applicator will use methods identified in land applicator's odor control plan

Spill Response and Recovery

(1) Responsibility of operato r to take any feasible action to stop and contain spill.

(2) Report to Maintenance Lead (**540-817-0224**), Plant Superintend (540 784 8232) or other plant personnel (540 784 0034, **540- 463-3566**) to request any needed assistance.

(3) Put out flares or reflector triangles for traffic control during cleanup. Notify county sheriff's office (**540- 463-7328**) if assistance is needed for traffic control.

(4) Recovery of spill may include addition of absorbent material (such as lime or sawdust) and removal by shovel to prevent spill from entering pathways to surface water.

(5) Required notifications within 24 hours specified in form below.

Spill description: Date_____Time_____Driver_____

Location and area of spill:_____

Nature of spill: Estimated quantity in gallons_____Area in sq.ft._____

Describe spill recovery: _____

_____

Corrective action to prevent future spills:_____

_____

_____

Notifications:

24 hour verbal to to DEQ (540- 574-7800) and the Rockbridge County Administrator (540-463-4361). It is the responsibility of the driver to report the spill to the Plant Superintendent immediately. A verbal report shall be made to DEQ and county as soon as possible, but no later than 24 hours. In the absence of the Plant Superintendent, the driver shall make the verbal reports . Notification after business hours may be provided by email, fax, or voice mail.

5-day letter (first class mail, email, fax) to DEQ and County Administrator including above information. Responsibility of Plant Superintendent or other designated personnel.

Biosolids Log - VA 0088161 - Rockbridge County - Aerobically Digested Biosolids

Month______________ Year _____ Truck # ____ Gallons ____

Day	Site#	Time Load Applied (Full unless noted)										Driver	CLA	Comments
Record any complaints, unusual events, inspections on date occuring. Use P2 if more space needed.														

Site #_____ Gallons Remaining____________________ Date ________________
Site #_____ Gallons Remaining____________________ Date ________________
Site #_____ Gallons Remaining____________________ Date ________________

I confirm that I was onsite at the reported times of operations for which I was the Certified Land Applicator in char
All land application activities were in compliance with Permit VA0088161 with the following exceptions:

____

____

Certified Land Applicator **Certificate #** **Date**

Odor Control Plan – Land Applier

Facility Name: Lexington-Rockbridge Regional WQCF
Address: 135 Bob Akins Circle
City State: Lexington, VA

VPDES/NPDES Permit Number:
VA 0088161

Contact Name: Ervin Buchanan
Phone Number: 540 784 8232
Email address: e.buchanan@msaplant.org

"Malodor" means an unusually strong or offensive odor associated with biosolids or sewage sludge as distinguished from odors commonly associated with biosolids or sewage sludge.

1) **Identify methods to identify malodor after delivery to a land application site (check all that apply):**
   - X Comparison of odors from each truck load to identify loads with unusually strong or offensive odor
   - ☐ pH analysis
   - ☐ Odor measurement device (e.g. Nasal Ranger)
   - X Other: Since LRRWQCF is generator, it is believed that unusually offensive odor would be detected before transport, while loading truck.

2) **Identify methods to abate malodor after delivery to a land application site (check all that apply):**
   - ☐ Removal to a landfill
   - X Transport to a more secluded site
   - ☐ Odor measurement device (e.g. Nasal Ranger)
   - X Other: Return to plant for discharge to head of plant for further processing

3) **Identify methods to abate malodor after biosolids are land applied:**
   - X Incorporation
   - X Other: application of lime

4) **Identify procedures for reporting odor complaints or determination of malodor to the generator:** *(Refer to contacts on Generator OCP, any agreements you have with generators regarding handling of odor complaints, etc.)*

LRRWQCF is both generator and land applier.

X Contact information for reporting odor or any other complaint is provided on signs posted at the land application, including the phone numbers for the wastewater treatment plant and the Departmental of Environmental Quality.

X Truck drivers document all complaints on daily logs and pass information onto plant personnel.

X All complaints are promptly investigated and documented on the monthly biosolids activity reports.

X Any unresolved complaints are referred to DEQ.

X It is realized that odor is a critical issue in the public perception and acceptance of biosolids. The following strategies are used to minimize the impact of nuisance odors from the land application of biosolids and to improve public relations with adjacent landowners.

- Land application may be limited during times when outdoor activities are planned upon request from adjacent landowners
- Factors such as wind, humidity, and time of day are considered when applying biosolids with more offensive odors.
- When possible, biosolids that have been stored during the winter are applied on more remote sites.

Raymond York
Director

Office: (540) 264-0213 Ext. 4
Fax: (540) 264-0171
ryork@blueridgeresourceauthoriy.org

STEPHEN R. LUCAS
Scale Operator

Office: (540) 264-0213 Ext. 0
Fax: (540) 264-0171
slucas@rockbridgecountyva.gov

BLUE RIDGE RESOURCE AUTHORITY

225 Landfill Road
Buena Vista, VA 24416

(540) 264-0213
www.blueridgeresourceauthority.org

FRED L. DUDLEY
Operations Manager

Office: (540) 264-0213 Ext. 2
Fax: (540) 264-0171
fdudley@blueridgeresourceauthority.org

LAUREN B. POTTER
Administrative Assistant/Secretary

Office: (540) 264-0213 Ext. 3
Fax: (540) 264-0171
lpotter@rockbridgecountyva.gov

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Treasurer Chairman Vice-Chairman

July 29, 2019

Lexington-Rockbridge Regional WQCF, VA 0088161
Attn: Irvin Buchanon
135 Bob Atkins Circle
Lexington, VA 24450

Mr. Buchanon,

In response to the July 26, 2019 request received from the Lexington-Rockbridge Regional WQCF, the Blue Ridge Resource Authority Landfill, Permit No. 75 would be able to accept sludge from the Lexington-Rockbridge Regional WQCF on an emergency basis. All sludge must meet the paint filter test (no free liquids) and any other Federal, State or Local solid waste requirements at the time of disposal. The tonnage accepted would be based on the specific ratio of waste to sludge allowed by the Virginia Department of Environmental Quality at the time of disposal.

Sincerely,

Raymond York

Raymond York
Director, BRRA

Maury Service Authority

Sustainably Providing Clean Water for the Public Health, Safety, and General Welfare of the Communities We Serve

130 Osage Lane
Lexington VA, 24450
Phone: (540) 463-3566
Fax: (540) 463-1172

July 26, 2019

Mr. Tim Grove
Houff's Feed and Fertilizer
97 Railside Drive
Weyers Cave, VA 24486

RE: NANI – Lexington Rockbridge Regional WQCF – Land Application of Biosolids

Tim,

Since our biosolids may be land applied under your VPA permits, we have provided the most recent NANI information to you. These results were from the March 28, 2019 sample.

In the event we use your services, we would provide you with the most current information at that time. Please let us know if you need additional information

Respectfully,

M. T. Loudermilk

Michael Loudermilk
MSA Maintenance Lead

CC: DEQ, Ervin Buchanan, L. Jordan Combs, Christina Shea, File

Comprehensive Field List for VA-0088161

SITE NAME	FIELD NUMBER	GROSS ACRES
BAISLEY	105	35.3
HOSTETTER	121	16.8
HOSTETTER	123	4.9
HOSTETTER	124	11.5
MARTIN	185	10.0
MARTIN	186	10.8
MARTIN	187	13.9
MARTIN	188	6.3
MARTIN	189	9.7
MARTIN	190	11.2
PENNINGTON	202	45.3
PENNINGTON	203	16.7
PENNINGTON	204	11.7
PENNINGTON	205	10.5
CARTER	206	32.4
CARTER	207	93.1
CARTER	208	21.6
CARTER	209	25.9
CARTER	210	50.4
CARTER	211	14.0
CARTER	212	37.4
VOSS	213	2.5
VOSS	214	17.1
VOSS	215	23.1
WILLIAMS	216	5.8
WILLIAMS	217	8.8
WILLIAMS	218	4.3
WILLIAMS	219	12.7
WILLIAMS	220	13.3
WILLIAMS	221	0.7
WILLIAMS	222	14.9
WILLIAMS	223	12.6
WILLIAMS	224	11.2
WILLIAMS	225	10.7
WILLIAMS	226	5.6
WILLIAMS	227	6.0
WILLIAMS	228	6.7
WILLIAMS	229	12.1
WILLIAMS	230	6.0
WILLIAMS	231	4.5
VOSS	232	3.0
VOSS	233	28.5
HILDAME	234	1.7
HILDAME	235	3.3
HILDAME	236	5.4
HILDAME	237	7.8
HILDAME	238	20.8

HILDAME	239	2.6
HILDAME	240	9.1
HILDAME	241	5.8
HILDAME	242	5.2
HOLLAND - RIVER ROAD	243	59.9
SWISHER - STEVENS	244	18.7
SWISHER - STEVENS	245	17.0
SWISHER - STEVENS	246	7.9
SWISHER - STEVENS	247	11.7
SWISHER - STEVENS	248	10.5
SWISHER - STEVENS	249	4.6
SWISHER - LANIER	250	8.2
SWISHER - LANIER	251	47.7
SWISHER - ALBERS	252	21.7
SWISHER - ALBERS	253	19.1
SWISHER - ALBERS	254	36.5
SWISHER - ALBERS	255	30.7
SWISHER - ALBERS	256	27.9
SWISHER - HIGH MEADOW	257	36.3
SWISHER - HIGH MEADOW	258	19.1
SWISHER - HIGH MEADOW	259	39.8
SWISHER - HIGH MEADOW	260	8.3
SWISHER - HIGH MEADOW	261	57.3
SWISHER - HIGH MEADOW	262	20.5
SWISHER - HIGH MEADOW	263	17.2
SWISHER - HIGH MEADOW	264	25.4
SWISHER - HIGH MEADOW	265	5.5
SWISHER - HOME	266	4.0
SWISHER - HOME	267	13.1
SWISHER - HOME	268	9.6
SWISHER - HOME	269	12.1
SWISHER - HOME	270	14.0
SWISHER - HOME	271	14.8
SWISHER - HOME	272	60.8
SWISHER - HOME	273	50.4
SWISHER - HOME	274	9.6
SWISHER - HOME	275	10.9
SWISHER - HOME	276	8.0
SWISHER - HOME	277	8.2
SWISHER - HOME	278	13.9
SWISHER - HOME	279	13.0
SWISHER - HOME	280	13.5
SWISHER - HOME	281	57.6
SWISHER - HOME	282	12.7
SWISHER - HOME	283	6.0
SWISHER - HOME	284	31.6
SWISHER - HOME	285	14.2
SWISHER - HOME	286	9.2
SWISHER - HOME	287	11.6
SWISHER - HOME	288	5.1
SWISHER - REID	289	26.0
FUNKHOUSER	290	29.3
FUNKHOUSER	291	24.6

PERMITTED FIELDS 2020 SUMMARY SHEET

Permit Name & Number: LRRWQCF - VA0088161

Approximate field center using AcrGIS software

Site Name & Number	*Map Field ID**	*DEQ Control ID*	*Gross Acres*	*Landowner Name*	*Tax Parcel ID*	*Latitude (Decimal Deg.)*	*Longitude (Decimal Deg.)*	*Site Type (Ag, Forest, etc)*	*Proposed Crop(s)*
BAISLEY 105	105		35.3	Margarete and Robert Baisley	76-3-1B1	37.783	-79.395	Agricultural	hay/pasture
HOSTETTER 121	121		16.8	Katherine Hostetter	49-A-57	37.838	-79.377	Agricultural	hay/pasture
HOSTETTER 123	123		4.9	Katherine Hostetter	49-A-57	37.838	-79.377	Agricultural	hay/pasture
HOSTETTER 124	124		11.5	Katherine Hostetter	49-A-57	37.838	-79.377	Agricultural	hay/pasture
MARTIN 185	185		10	Clifford H. and Susan J. Martin, The Flying M, LLC	64-A-31, 64-A-31A	37.832	-79.300	Agricultural	hay/pasture
MARTIN 186	186		10.8	Clifford H. and Susan J. Martin, The Flying M, LLC	64-A-31, 64-A-31A	37.832	-79.300	Agricultural	hay/pasture
MARTIN 187	187		13.9	Clifford H. and Susan J. Martin, The Flying M, LLC	64-A-31, 64-A-31A	37.832	-79.300	Agricultural	hay/pasture
MARTIN 188	188		6.3	Clifford H. and Susan J. Martin, The Flying M, LLC	64-A-31, 64-A-31A	37.832	-79.300	Agricultural	hay/pasture
MARTIN 189	189		9.7	Clifford H. and Susan J. Martin, The Flying M, LLC	64-A-31, 64-A-31A	37.832	-79.300	Agricultural	hay/pasture
MARTIN 190	190		11.2	Clifford H. and Susan J. Martin, The Flying M, LLC	64-A-31, 64-A-31A	37.832	-79.300	Agricultural	hay/pasture
PENNINGTON 202	202		45.3	Larry J. Pennington, Sally Lohr, Vicky Sue Carr	37-A-33	37.880	-79.359	Agricultural	hay/pasture
PENNINGTON 203	203		16.7	Larry J. Pennington, Sally Lohr, Vicky Sue Carr	37-A-33	37.880	-79.359	Agricultural	hay/pasture
PENNINGTON 204	204		11.7	Larry J. Pennington, Sally Lohr, Vicky Sue Carr	37-A-50	37.880	-79.359	Agricultural	hay/pasture
PENNINGTON 205	205		10.5	Larry J. Pennington, Sally Lohr, Vicky Sue Carr	37-A-50	37.880	-79.359	Agricultural	hay/pasture
CARTER 206	206		32.4	James A. Carter	77-A-19	37.749	-79.368	Agricultural	hay/pasture
CARTER 207	207		93.1	James A. Carter	77-A-19	37.749	-79.368	Agricultural	hay/pasture
CARTER 208	208		21.6	James A. Carter	77-A-19	37.749	-79.368	Agricultural	hay/pasture
CARTER 209	209		25.9	James A. Carter	77-A-19	37.749	-79.368	Agricultural	hay/pasture
CARTER 210	210		50.4	James A. Carter	90-A-1	37.749	-79.368	Agricultural	hay/pasture
CARTER 211	211		14.0	James A. Carter	90-A-1	37.749	-79.368	Agricultural	hay/pasture
CARTER 212	212		37.4	James A. Carter	90-A-1	37.749	-79.368	Agricultural	hay/pasture
VOSS 213	213		2.5	Darvin A. Voss and Gail D. Milam	88-5-1H	37.748	-79.424	Agricultural	hay/pasture
VOSS 214	214		17.1	Darvin A. Voss and Gail D. Milam	88-5-1H, 88-5-1I	37.748	-79.424	Agricultural	hay/pasture
VOSS 215	215		23.1	Darvin A. Voss and Gail D. Milam	88-5-1H	37.748	-79.424	Agricultural	hay/pasture
WILLIAMS 216	216		5.8	Pioneer Estate, LLC	63-A-48	37.832	-79.351	Agricultural	crop
WILLIAMS 217	217		8.8	Pioneer Estate, LLC	63-A-48	37.832	-79.351	Agricultural	crop
WILLIAMS 218	218		4.3	Pioneer Estate, LLC	63-A-48	37.832	-79.351	Agricultural	crop
WILLIAMS 219	219		12.7	Pioneer Estate, LLC	63-A-48	37.832	-79.351	Agricultural	hay/pasture
WILLIAMS 220	220		13.3	Pioneer Estate, LLC	63-A-48	37.832	-79.351	Agricultural	hay/pasture
WILLIAMS 221	221		0.7	Pioneer Estate, LLC	63-A-48	37.832	-79.351	Agricultural	hay/pasture
WILLIAMS 222	222		14.9	Pioneer Estate, LLC	63-A-48	37.832	-79.351	Agricultural	crop
WILLIAMS 223	223		12.6	Pioneer Estate, LLC	63-A-60	37.832	-79.351	Agricultural	crop
WILLIAMS 224	224		11.2	Pioneer Estate, LLC	63-A-60	37.832	-79.351	Agricultural	crop
WILLIAMS 225	225		10.7	Pioneer Estate, LLC	63-A-60	37.832	-79.351	Agricultural	crop
WILLIAMS 226	226		5.6	Pioneer Estate, LLC	63-A-60	37.832	-79.351	Agricultural	crop
WILLIAMS 227	227		6.0	Pioneer Estate, LLC	63-A-60	37.832	-79.351	Agricultural	crop
WILLIAMS 228	228		6.7	Pioneer Estate, LLC	63-A-60	37.832	-79.351	Agricultural	crop
WILLIAMS 229	229		12.1	Martha B. Stuart	63-A-59, 63-A-64, 63-A-65	37.832	-79.351	Agricultural	crop
WILLIAMS 230	230		6.0	Martha B. Stuart	63-A-59	37.832	-79.351	Agricultural	crop
WILLIAMS 231	231		4.5	Martha B. Stuart	63-A-65	37.832	-79.351	Agricultural	crop

*The Map Field ID is used for readability on maps, the Site Name and Number is used for reporting purposes.

Haul Route: The site maps in conjunction with the above longitude and latitude coordinates, and source location are route planning tools meant to be a guide to inidcatesuggested haul routes for various preferences: to include but not limited to all federal, state and local granted STAA access routes

NEW FIELDS 2020 FIELD SUMMARY SHEET

Permit Name & Number: LRRWQCF - VA0088161

Approximate field center using AcrGIS software

Site Name & Number	*Map Field ID**	*DEQ Control ID*	*Gross Acres*	*Landowner Name*	*Tax Parcel ID*	*Latitude (Decimal Deg.)*	*Longitude (Decimal Deg.)*	*Site Type (Ag, Forest, etc)*	*Proposed Crop(s)*
VOSS 232	232		3.0	Darvin A. Voss and Gail D. Milam	88-5-1G, 88-5-1GA	37.746	-79.424	Agricultural	hay/pasture
VOSS 233	233		28.5	Darvin A. Voss and Gail D. Milam	88-7-2, 88-7-2C	37.746	-79.424	Agricultural	hay/pasture
HILDAME	234		1.7	Hildame Farm Ins	76-A-49	37.752	-79.419	Agricultural	hay/pasture
HILDAME	235		3.3	Hildame Farm Ins	75-A-93	37.752	-79.419	Agricultural	hay/pasture
HILDAME	236		5.4	Hildame Farm Ins	75-A-93	37.752	-79.419	Agricultural	hay/pasture
HILDAME	237		7.8	Hildame Farm Ins	75-A-93	37.752	-79.419	Agricultural	hay/pasture
HILDAME	238		20.8	Hildame Farm Ins	75-A-94	37.752	-79.419	Agricultural	hay/pasture
HILDAME	239		2.6	Hildame Farm Ins	75-A-93	37.752	-79.419	Agricultural	hay/pasture
HILDAME	240		9.1	Hildame Farm Ins	75-A-93	37.752	-79.419	Agricultural	hay/pasture
HILDAME	241		5.8	Hildame Farm Ins	75-A-93	37.752	-79.419	Agricultural	hay/pasture
HILDAME	242		5.2	Hildame Farm Ins	75-A-93	37.752	-79.419	Agricultural	hay/pasture
HOLLAND - RIVER ROAD	243		59.9	Keith W. Holland and Penny G. Holland	98-16-1	37.667	-79.438	Agricultural	hay/pasture
SWISHER - STEVENS	244		18.7	Stevens Family Limited Partnership	46-A-70C	37.866	-79.513	Agricultural	hay/pasture
SWISHER - STEVENS	245		17.0	Stevens Family Limited Partnership	46-A-64A	37.866	-79.513	Agricultural	hay/pasture
SWISHER - STEVENS	246		7.9	Stevens Family Limited Partnership	46-A-64A	37.866	-79.513	Agricultural	hay/pasture
SWISHER - STEVENS	247		11.7	Stevens Family Limited Partnership	46-A-64A	37.866	-79.513	Agricultural	crop
SWISHER - STEVENS	248		10.5	Stevens Family Limited Partnership	46-A-64A	37.866	-79.513	Agricultural	hay/pasture
SWISHER - STEVENS	249		4.6	Stevens Family Limited Partnership	46-A-64A	37.866	-79.513	Agricultural	hay/pasture
SWISHER - LANIER	250		8.2	John Laney Lanier	48-A-28A	37.844	-79.423	Agricultural	crop
SWISHER - LANIER	251		47.7	John Laney Lanier	48-A-28A	37.844	-79.423	Agricultural	hay/pasture
SWISHER - ALBERS	252		21.7	John E. Albers and Alessandria Albers	48-A-5	37.856	-79.438	Agricultural	hay/pasture
SWISHER - ALBERS	253		19.1	John E. Albers and Alessandria Albers	48-A-5	37.856	-79.438	Agricultural	hay/pasture
SWISHER - ALBERS	254		36.5	John E. Albers and Alessandria Albers	48-A-5	37.856	-79.438	Agricultural	hay/pasture
SWISHER - ALBERS	255		30.7	John E. Albers and Alessandria Albers, Betty M. Swisher	48-A-5, 48-1-4	37.856	-79.438	Agricultural	hay/pasture
SWISHER - ALBERS	256		27.9	John E. Albers and Alessandria Albers, Keith Lewis Swisher	48-A-5, 48-A-47	37.856	-79.438	Agricultural	hay/pasture
SWISHER - HIGH MEADOW	257		36.3	High Meadow Land Company	47-3-1, 47-3-2	37.848	-79.456	Agricultural	hay/pasture
SWISHER - HIGH MEADOW	258		19.1	High Meadow Land Company	47-3-1	37.848	-79.456	Agricultural	hay/pasture
SWISHER - HIGH MEADOW	259		39.8	High Meadow Land Company	48-1-1B, 48-1-3, 48-1-3B	37.848	-79.456	Agricultural	hay/pasture
SWISHER - HIGH MEADOW	260		8.3	High Meadow Land Company	48-1-1B2, 48-1-3B	37.848	-79.456	Agricultural	crop
SWISHER - HIGH MEADOW	261		57.3	High Meadow Land Company	48-1-1B1, 48-1-1B2, 48-1-3B	37.848	-79.456	Agricultural	hay/pasture
SWISHER - HIGH MEADOW	262		20.5	High Meadow Land Company	48-1-1, 48-1-1B	37.848	-79.456	Agricultural	hay/pasture
SWISHER - HIGH MEADOW	263		17.2	High Meadow Land Company	48-1-1, 48-1-1B	37.848	-79.456	Agricultural	hay/pasture
SWISHER - HIGH MEADOW	264		25.4	High Meadow Land Company	48-1-1	37.848	-79.456	Agricultural	hay/pasture
SWISHER - HIGH MEADOW	265		5.5	High Meadow Land Company	48-1-1	37.848	-79.456	Agricultural	hay/pasture
SWISHER - HOME	266		4.0	Raymond H. Bruce, Jacqueline L. Bruce	48-1-2B	37.848	-79.436	Agricultural	hay/pasture
SWISHER - HOME	267		13.1	Raymond H. Bruce, Jacqueline L. Bruce, Keith L. Swisher, Marie L. Swisher	48-1-2B, 48-1-2E1, 48-1-2E	37.848	-79.436	Agricultural	hay/pasture
SWISHER - HOME	268		9.6	Raymond H. Bruce, Jacqueline L. Bruce, Keith L. Swisher, Marie L. Swisher	48-1-2B, 48-1-2E1, 48-1-2E	37.848	-79.436	Agricultural	hay/pasture
SWISHER - HOME	269		12.1	Raymond H. Bruce, Jacqueline L. Bruce, Keith L. Swisher, Marie L. Swisher	48-1-2B, 48-1-2E1	37.848	-79.436	Agricultural	hay/pasture
SWISHER - HOME	270		14.0	Keith L. Swisher, Marie L. Swisher	48-1-2E1, 48-1-2E	37.848	-79.436	Agricultural	crop
SWISHER - HOME	271		14.8	Betty M. Swisher	48-1-2F	37.848	-79.436	Agricultural	crop
SWISHER - HOME	272		60.8	Betty M. Swisher	48-1-2F, 48-1-4	37.848	-79.436	Agricultural	hay/pasture
SWISHER - HOME	273		50.4	Betty M. Swisher	48-1-2F, 48-1-4	37.848	-79.436	Agricultural	hay/pasture
SWISHER - HOME	274		9.6	Betty M. Swisher	48-1-4	37.848	-79.436	Agricultural	hay/pasture
SWISHER - HOME	275		10.9	Betty M. Swisher	48-1-4	37.848	-79.436	Agricultural	crop
SWISHER - HOME	276		8.0	Betty M. Swisher	48-1-4	37.848	-79.436	Agricultural	crop
SWISHER - HOME	277		8.2	Betty M. Swisher	48-1-2F, 48-1-4	37.848	-79.436	Agricultural	crop
SWISHER - HOME	278		13.9	Betty M. Swisher	48-1-2F, 48-1-4	37.848	-79.436	Agricultural	crop
SWISHER - HOME	279		13.0	Keith Lewis Swisher	48-A-7	37.848	-79.436	Agricultural	hay/pasture
SWISHER - HOME	280		13.5	Keith Lewis Swisher	48-A-7	37.848	-79.436	Agricultural	hay/pasture
SWISHER - HOME	281		57.6	Keith Lewis Swisher	48-A-7, 48-A-29	37.848	-79.436	Agricultural	hay/pasture
SWISHER - HOME	282		12.7	Keith Lewis Swisher	48-A-29	37.848	-79.436	Agricultural	hay/pasture
SWISHER - HOME	283		6.0	Keith Lewis Swisher	48-A-29	37.848	-79.436	Agricultural	hay/pasture
SWISHER - HOME	284		31.6	Keith Lewis Swisher	48-A-7	37.848	-79.436	Agricultural	hay/pasture
SWISHER - HOME	285		14.2	Keith Lewis Swisher	48-A-29	37.848	-79.436	Agricultural	hay/pasture
SWISHER - HOME	286		9.2	Keith Lewis Swisher	48-A-29	37.848	-79.436	Agricultural	hay/pasture
SWISHER - HOME	287		11.6	Keith Lewis Swisher	48-A-7	37.848	-79.436	Agricultural	crop
SWISHER - HOME	288		5.1	Keith Lewis Swisher	48-A-7	37.848	-79.436	Agricultural	hay/pasture
SWISHER - REID	289		26.0	Reid K. Swisher, Jr., Betty M. Swisher	47-2-9	37.855	-79.454	Agricultural	hay/pasture
FUNKHOUSER	290		29.3	Roy W. Funkhouser, Kristie J. Funkhouser	96-16-6	37.668	-79.520	Agricultural	hay/pasture
FUNKHOUSER	291		24.6	Edward A., David A., Roy W., Calvin A., Gary S., and John G. Funkhouser	96-16-4, 96-16-5, 96-16-6, 106-7-1B	37.668	-79.520	Agricultural	hay/pasture

*The Map Field ID is used for readability on maps, the Site Name and Number is used for reporting purposes.

Haul Route: The site maps in conjunction with the above longitude and latitude coordinates, and source location are route planning tools meant to be a guide to inidcate suggested haul routes for various preferences: to include but not limited to all federal, state and local granted STAA access routes.

NOTICE AND NECESSARY INFORMATION

Biosolids notification requirements to comply with 9VAC25-31-530.F – G or 9VAC25-32-313.G – H.

Part I – To be completed by PREPARERS of biosolids and provided to the person who applies or receives those biosolids

Facility Name: Lexington-Rockbridge Regional WQCF Permit Number: VA0088161

A. Metals Limitations

Sample Date(s): 3/14/18 Number of Samples: 1

Parameters	Concentrations		PC/CPLR Limitations	Ceiling Limitations [2]
	Monthly Average (mg/kg) [1]	Maximum (mg/kg) [1]	Monthly Average (mg/kg) [1]	Maximum (mg/kg) [1]
Total Arsenic	**5.00**	**5.00**	41	75
Total Cadmium	**22.6**	**22.6**	39	85
Total Copper	**352**	**352**	1,500	4,300
Total Lead	**22.2**	**22.2**	300	840
Total Mercury	**0.7**	**0.7**	17	57
Total Molybdenum	**9.36**	**9.36**	NL [3]	75
Total Nickel	**20.7**	**20.7**	420	420
Total Selenium	**6.4**	**6.4**	100	100
Total Zinc	**795**	**795**	2,800	7,500

(1) Values to be reported on a dry weight basis.
(2) Sludge may not be land applied if any pollutant exceeds these values.
(3) The monthly average concentration for molybdenum is currently under study by USEPA. Research suggests that a monthly average molybdenum concentration below 40 mg/kg may be appropriate to reduce the risk of copper deficiency in grazing animals.

B. Class B Pathogen Reduction

Class B biosolids pathogen reduction requirements were achieved in accordance with 9VAC25-31-710.B or 9VAC25-32-675.B by:

✓ Alternative 1: Fecal coliform testing -geometric mean of 7 samples

☐ Alternative 2: Process to Significantly Reduce Pathogens (PSRP) - if selected, indicate process below:

- ☐ Option 1 - Aerobic digestion
- ☐ Option 2 - Air drying beds
- ☐ Option 3 - Anaerobic digestion
- ☐ Option 4 - Composting
- ☐ Option 5 - Lime Stabilization
- ☐ Other: _____

NOTICE AND NECESSARY INFORMATION

C. Vector Attraction Reduction (VAR)

✓ VAR requirements for Class B biosolids were achieved in accordance with 9VAC25-31-720.B.1 – 8 or 9VAC25-32-685.B.1 – 8 by:

☐ Option 1: ≥ 38% volatile solids reduction
☐ Option 2: Anaerobic 40 day bench test
☐ Option 3: Aerobic 30 day bench test
✓ Option 4: Specific Oxygen Uptake Rate (SOUR) test
☐ Option 5: Aerobic process, 14 days @ 40°C (45°C)
☐ Option 6: Alkaline stabilization
☐ Option 7: Dry to ≥ 75% T.S. w/no unstabilized 1° sludges
☐ Option 8: Dry to ≥ 90% T.S.

OR

☐ VAR requirements for Class B biosolids were **not** achieved in accordance with 9VAC25-31-720.B.1 – 8 or 9VAC25-32-685.B.1 – 8; therefore, Option 9 (Injection) or Option 10 (Incorporation) is required at the land application site.

D. Nutrient Concentrations

Sample Date(s): 3/28/18 Number of Samples: 1

Parameters	Concentrations	
	Monthly Average (mg/kg) (1)	Maximum (mg/kg) (1)
Total Nitrogen as N	**68,822.6**	**68,822.6**
Total Phosphorus as P	**36700**	**36700**

*Values to be reported on a dry weight basis.

E. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title: Ervin Buchanan Superintendent

Signature Ervin Buchanan Date Signed 8-1-2019

Telephone number 540-784-8232

Site: FUNKHOUSER
Owners: Willie Funkhouser, et al.
Operator: Willie Funkhouser

Site Map
LRRWQCF
VA0088161

Field	Gross Acres
290	29.3
291	24.6

0 800 1,600 3,200 Feet

Date: 07/30/2019

- FUNKHOUSER Rocks (50 ft buffer)
- FUNKHOUSER Houses (200 ft buffer)
- FUNKHOUSER Closed Sinkholes (50 ft buffer)
- FUNKHOUSER Public Property Lines (200 ft buffer)
- FUNKHOUSER Property Lines (100 ft buffer)
- Public Roads (10 ft buffer)
- FUNKHOUSER Intermittent Streams (100 ft buffer, 35 ft vegetated)
- FUNKHOUSER Ponds (100 ft buffer, 35 ft vegetated)
- FUNKHOUSER Steep Land
- FUNKHOUSER Fields

N W E S